PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Attorney Docket No. UTILITY PATENT APPLICATION James E. Chitwood First Inventor **TRANSMITTAL** High Power Umbilicals For Electric Flowline Immersion Heatir Title

(Only for r	new nonprovisional applications under 37 CFR 1.53(b))	Express Mail Label No. EU 83	32 621 144 US		
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.		ADDRESS TO:  Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450			
1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27.  Specification [Total Pages 167] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s)		7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on:  i. CD-ROM or CD-R (2 copies); or  ii. Paper  c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS			
4.  Drawin 5. Oath or Dec a.  Net b.  Cop (for	b. Copy from a prior application (37 CFR 1.63(d)) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).  (when there is an assignee) English Translation Document (if applicable) Information Disclosure Statement (IDS)/PTO-1449 Citations Preliminary Amendment Return Receipt Postcard (MPEP 503) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed) Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35		ent Power of Attorney cument (if applicable)  449 Copies of IDS  449 Citations  t (MPEP 503) itemized) y Document(s) med) t under 35 U.S.C. 122 cust attach form PTO/SB/35		
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:					
Continuation  Divisional  Continuation-in-part (CIP)  of prior application No.: 10/223.025  Prior application information:  Examiner  Giovanna M. Collins  Art Unit: 3672  For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.  19. CORRESPONDENCE ADDRESS					
Customer Number: OR Correspondence address below					
Name	3123 - 198th Place S.E.				
Address	PRIENT TRADEMENT DEFICE				
City	Bothell	State WA Zip Code 98012  Felephone 125,486,8789 Fax 425,482,2013			
	0.0.7.	Telephone 425-486-8789	425-482-2013		
	Name (Print/Type)   William Bapning Vail III				
Signature    Date   2/4/2003					

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is for file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Telephone 425-486-8789

PTO/SB/17 (10-03)
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EEE TOANGMITTAL		Complete if Known					
FEE TRANSMITTAL			cation I	Numbe	er		
for EV 2004	3	Filing	Date				
for FY 2004		First I	Named	Inven	tor	James E. Chitwood	
Effective 10/01/2003. Patent fees are subject to annual revision.		Exam	iner Na	ame			
Applicant claims small entity status. See 37 CFR 1.27		Art Unit					
TOTAL AMOUNT OF PAYMENT (\$) 514.00			ney Doo	cket N	0		
METHOD OF DAVMENT (shock off that cooks)		7 111071	.0, 20	_		LCULATION (continued)	
METHOD OF PAYMENT (check all that apply)			3. ADDITIONAL FEES				
Check Credit card Money Other None		Entity			3		
Deposit Account:	Fee	Fee	Fee	Fee		Fee Description	
Deposit Account 50-0499	1051	• • •	Code 2051		Surch	arge - late filing fee or oath	Fee Paid
Number Deposit Account Vails Inventions	1051		2052			large - late provisional filing fee or	_
Account Valls Inventions Name					cover	sheet	
The Director is authorized to: (check all that apply)	1053	130	1053 1812 2			English specification ing a request for ex parte reexamination	
Charge fee(s) indicated below Credit any overpayments	1804	-	1804	-,		esting publication of SIR prior to	
Charge any additional fee(s) or any underpayment of fee(s)					Exam	iner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*		esting publication of SIR after niner action	
FEE CALCULATION	1251	110	2251	55	Exter	nsion for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210	Exter	nsion for reply within second month	
Large Entity Small Entity	1253		2253		Exter	nsion for reply within third month	
Fee Fee Fee Fee Pee Paid Code (\$) Code (\$)	1254	1,480	2254	740		nsion for reply within fourth month	
1001 770 2001 385 Utility filing fee 385.00		2,010	2255	1,005	Exter	nsion for reply within fifth month	
1002 340 2002 170 Design filing fee	1401		2401			e of Appeal	
1003 530 2003 265 Plant filing fee	1402		2402		_	a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403		2403		•	est for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451 2452			on to institute a public use proceeding on to revive - unavoidable	
SUBTOTAL (1) (\$) 385.00			2452				
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE		1,330 1,330	2501			on to revive - unintentional vissue fee (or reissue)	
Fee from Extra Claims below Fee Paid	1502		2502		•	gn issue fee	
Total Claims $6   -20^{**} = 0   X   9.00 = 0.00$	1503		2503		-	t issue fee	
Independent 6 - 3** = 3 x 43.00 = 129.00	1460	130	1460	130	Petiti	ions to the Commissioner	
Multiple Dependent	1807	50	1807	50	Proc	essing fee under 37 CFR 1.17(q)	
Large Entity   Small Entity	1806	180	1806	180	Subm	nission of Information Disclosure Stmt	
Fee Fee Fee Fee <u>Fee Description</u> Code (\$)	8021	40	8021	40	Reco	rding each patent assignment per erty (times number of properties)	
1202 18 2202 9 Claims in excess of 20	1809	770	2809	385		any (times number of properties)  a submission after final rejection	
1201 86 2201 43 Independent claims in excess of 3					(37 Č	FR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385		ach additional invention to be nined (37 CFR 1.129(b))	
1204 86 2204 43 ** Reissue independent claims over original patent	180	1 770	2801	385		uest for Continued Examination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900		uest for expedited examination design application	
Oth			ecify) _				
SUBTOTAL (2) (\$) 129.00 **or number previously paid, if greater; For Reissues, see above			Basic F	iling Fe	ee Pai	id SUBTOTAL (3) (\$)	
SUBMITTED BY						(Complete (if applicable))	

mny

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Rig-2

Registration No. (Attomp//Agent)

Name (Print/Type)

Signature

William Banning Vail III

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Certificate of Deposit by "Express Mail"

Express Mail Num	ıber: <i>EU 832</i>	621 144 US	
Date of Deposit: _	December	4,2003	

I hereby certify that this paper or fee is being deposited with the United States
Postal Service using "Express Mail Post Office to Addressee" Service under
37 CFR § 1.10 on the date indicated above and is addressed to the "Commissioner for
Patents, P.O. Box 1450, Alexandria, VA 22313-1450."

Signed:

Marilyn L. Vail

**TYPE OF DOCUMENT: Utility Patent Application entitled:** 

"HIGH POWER UMBILICALS FOR ELECTRIC FLOWLINE IMMERSION HEATING OF PRODUCED HYDROCARBONS"

1	IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
2	
3	Certificate of Deposit by "Express Mail"
4	Express Mail Number: EU 832 621 144 US
5	Date of Deposit: Leember 4,2003
6	I hereby certify that this paper or fee is being
7	deposited with the United States Postal Service using
8	"Express Mail Post Office to Addressee" Service under
9	37 CFR § 1.10 on the date indicated above and is
10	addressed to the "Mail Stop Patent Application, Commissioner
11	for Patents, P.O. Box 1450, Alexandria, VA 22313-1450."
12	$\langle \Omega \cdot \rho \rangle = \int \langle \rho \rangle$
13	Signed: //arrly A. Vac
14	Marilyn L. Vail
15	/
16	
17	TRANSMITTAL LETTER FOR PATENT APPLICATION WITH REMARKS
18	
19	December 4, 2003
20	
21	Commissioner for Patents
22	P.O. Box 1450
23	Alexandria, VA 22313-1450
24	
25	
26	Dear Sir:
27	
28	Please file the following enclosed patent application
29	papers:
30	
31	FIRST NAMED INVENTOR: JAMES E. CHITWOOD
32	
33	SECOND NAMED INVENTOR. WILLIAM BANNING VAIL III

1	TITLE: "HIGH POWER UMBILICALS FOR ELECTRIC FLOWLINE
2	IMMERSION HEATING OF PRODUCED HYDROCARBONS"
3	
4	TYPE APPLICATION: C.I.P. APPLICATION OF U.S. PATENT
5	APPLICATION SERIAL NO. 10/223,025
6	
7	PAGES OF SPECIFICATION, CLAIMS, ABSTRACT: 167
8	
9	SHEETS OF FORMAL DRAWINGS: 48
10	
11	NUMBER OF INDEPENDENT CLAIMS: 6
12	·
13	NUMBER OF DEPENDENT CLAIMS: 0
14	
15	TOTAL NUMBER OF CLAIMS: 6
16	
17	PRIORITY CLAIMED: SEE DECLARATION, FORM PTO/SB/01
18	and FORM PTO/SB/02A
19	
20	
21	ADDITIONAL DOCUMENTS ACCOMPANYING
22	THIS TRANSMITTAL LETTER:
23	
24	1. Utility Patent Application Transmittal Form PTO/SB/05
25	
26	2. Declaration for Utility or Design Patent
27	Application Form PTO/SB/01 and Form PTO/SB/02A
28	(a total of 6 sheets)
29	
30	3. Fee Transmittal FY 2004 Form PTO/SB/17
31	
32	4. Vail's Inventions Check No. 8598 in the amount
33	of \$514.00

1	5. Self-addressed stamped receipt postcard
2	
3	6. Separate Certificate of Deposit by "Express Mail"
4	
5	
6	PAYMENT OF FEES:
7	
8	Vail's Inventions Check No. 8598 in the amount of five
9	hundred fourteen dollars (\$514.00) is included herein to pay
10	for the following fees:
11	
12	(a) Basic patent fee for Small Entity \$ 385.00
13	
14	(b) Fee for Independent Claims in
15	Excess of three which
16	is <u>3</u> x \$43.00 \$ 129.00
17	
18	(b) Fee for total claims in excess of \$ 0.00
19	20 which is $0 \times 9.00$
20	
21	
22	
23	Total \$ 514.00
24	
25	
26	However, if the applicant has made a mistake on the
27	payment of any fees herein, applicant requests that any such
28	deficiencies be billed to Account No. 50-0499 that was
29	established on 3/20/1998. Fees on patents and patent
30	applications entirely owned, or owned in part, by William
31	Banning Vail III may be made from this account. William
32	Banning Vail III is doing business as an inventor under the
33	name of "Vail's Inventions". Marilyn L. Vail, the wife of

William Banning Vail III, may also direct that fees be paid from this Account No. 50-0499. If for unforeseen reasons funds are not available in that account, please let applicant know as soon as possible and said deficiencies will be paid immediately. In the event of overpayment of any fees herein, applicant respectfully requests that any overpayment be deposited into Account No. 50-0499.

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### STATEMENT OF PRIOR ART:

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Applicant is unaware of any additional relevant art in the field other than that stated in the specification.

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16 <u>STATEMENT OF SMALL ENTITY STATUS:</u> Applicant hereby certifies 17 that this application is entitled to be filed under a "Small 18 Entity Status".

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# 20

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**REMARKS:** 

## \_\_\_

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It is noted by the inventor that the Certificate of Deposit by "Express Mail" is being used. Therefore, the filing date of the application is that date when the application is mailed (December 4, 2003).

262728

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No foreign applications have been filed by applicant related to this application. However, a PCT application will be filed shortly related to this application that will be filed on, or before, December 8, 2003.

313233

Formal drawings are submitted herein.

Although the First Inventor is Mr. James E. Chitwood, it has been decided that the Second Named Inventor, myself, William Banning Vail III, shall be responsible for all correspondence to, and from, the USPTO.

## Pro-Se Case

This case herein is a pro-se case. Therefore, in the event that the USPTO objects to any, or all of the claims herein, applicant respectfully requests assistance from the Examiner under MPEP Section 707.07(j) to draft an acceptable claim based upon the disclosure and language in the application.

Further, in the event that the Examiner rejects the claims, applicant requests that Examiner direct applicant to the claims closest to allowability, and if possible, applicant further requests that Examiner preliminarily mark-up one of said claims in a future office action to further aid applicant to achieve allowability of at least one claim in an expeditious fashion.

# DECLARATION:

 As applicant, I hereby verify that all statements made herein of my own knowledge are true and that all statements made on my information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that

1 such wilful false statements may jeopardize the validity of 2 the application or any patent issuing thereon. 3 This application is filed pro-se. The applicant is using the book entitled "Patent It Yourself", Ninth Edition, 5 by David Pressman, and if there are errors, please advise the 7 inventor, and such errors will be corrected immediately. 8 9 10 Please address all correspondence involving this case to the co-inventor at the below defined address. 11 Thank you. 12 13 14 Very respectfully submitted, 15 16 17 18 William Banning Vail 19 20 Second Named Inventor and 21 President of Smart Drilling and Completion, Inc. 22 3123 - 198th Place S.E. 23 Bothell, Washington 98012 24 Home Telephone: (425) 486-8789 (425) 482-2013 25 Home Fax: 26 27 28 29 (Note: This is the signature page of the document entitled "TRANSMITTAL LETTER FOR PATENT APPLICATION WITH REMARKS" for 30 the U.S. Patent Application entitled "HIGH POWER UMBILICALS 31 FOR ELECTRIC FLOWLINE IMMERSION HEATING OF PRODUCED 32 33 HYDROCARBONS".)